

5.25-INCH MAGNETO OPTICAL DISK

Speedy access and data transfer with up to 9.1GB capacity—
Sony's precision disk technology makes it possible.

Up to 9.1GB Storage Capacity

To achieve 9.1GB storage capacity, Sony's 5.25 MO disk employs MSR (Magnetically induced Super Resolution) and Land & Groove Recording technologies. This enormous capacity is 14 times the 650MB of Sony's first-generation MO disk.

Compatibility for reliable performance in diverse environments

Sony's wide-margin media is designed to be highly tolerant of variations in laser power that may occur in different usage environments. Performance stability is further assured by Sony's high-precision stamper and substrate molding technology.

Estimated archival stability exceeding 50 years

With data integrity maintained over at least one million erase/write cycles and a data-read life estimated at more than 50 years, Sony 5.25 MO media is highly suited to long-term data archiving.



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Robust construction for auto-changer use

Sony uses its own rugged cartridge design and mechanical components to achieve durability of at least 100,000 load/unload cycles per side. Sony's original antistatic hard coat treatment reduces static buildup and protects the disk surface from scratches and dust.

Magnetic data resolution finer than laser spot size

With MSR (Magnetically-induced Super-Resolution) technology, the recorded magnetic domain at the center of the laser spot is selectively heated to transfer its data individually to a special readout layer. This makes it possible to distinguish magnetic data that is much smaller than laser beam spot size.



5.25 MO Disk

Land & Groove Recording raises data density

Besides writing data in the grooves like a conventional disk, this format uses the "lands" between the grooves as well. Land & Groove Recording creates two spiral data tracks to dramatically raise data density and disk capacity.

Widely adopted for demanding applications

With its high-speed random access and massive storage capacity, the 5.25 MO lends itself to a wide variety of applications. MO drives can be easily connected to PCs and workstations including LAN and Web servers to handle computer graphics, CAD/CAM, X-ray and ultra-sound medical images, non-linear audio/video editing, and government agency or library document archiving. Other popular applications include large-scale libraries and jukeboxes that depend on high-speed disk changes.

Model Name	EDM-600C	EDM-650C	EDM-1200C CWO-1200C	EDM-1300C CWO-1300C	EDM-2300C CWO-2300C	EDM-2600C CWO-2600C	EDM-4100C CWO-4100C
Format	1X	1X	2X	2X	4X	4X	8X
Physical Tracks	18,751		21,600		26,010	26,040	37,696
Logical Tracks	18,751		37,600		73,080	75,735	130,112
Sector Size (Bytes/Sector)	512	1,024	512	1,024	512	1,024	512
Track Pitch (µm)	1.6		1.39		1.15		512
Number of Bands	—		16		30	34	38
Recording Capacity							
Unformatted (MB)	594	650	1,193	1,309	2,319	2,636	4,130

Model Name	EDM-4800C CWO-4800C	EDM-5200C CWO-5200C	EDM-9100C CWO-9100C	EDM-8600C CWO-8600C	EM1-9100B	EM5-9100B
Format	8X	8X	14X	14X	14X	14X
Physical Tracks	37,485	38,136	49,728	49,560	49,728	
Logical Tracks	138,915	182,508	186,480	300,900	186,480	
Sector Size (Bytes/Sector)	1,024	2,048	4,096	2,048	1,024*	512
Track Pitch (µm)	0.85		0.65			
Number of Bands	45	24	16	30	16	
Recording Capacity						
Unformatted (MB)	4,836	5,233	9,165	8,627	9,165	
Number of Sides Used	Double Sided					

*Software emulation based on 4096 Byte/Sector.

Dimensions

Cartridge Dimensions (mm): 135X153X11

Disk Diameter (mm): 130

Weight (g): 165

Reliability (Accelerated Test Results)

Erase/Write/Read Cycles: =10⁶

Read Cycles: =10⁷

Byte Error Rate: =10⁻¹²

Estimated Archival Life: = 50 years

Environmental Requirements

Operation Conditions: (°F(°C);%RH):
41~131 (5~55);3~85

Storage Conditions: (°F(°C);%RH):
14~131 (-10~55); 3~90

Absolute Humidity (g/m3): 1~30

For more information, visit our website at sony.com/storagemedia